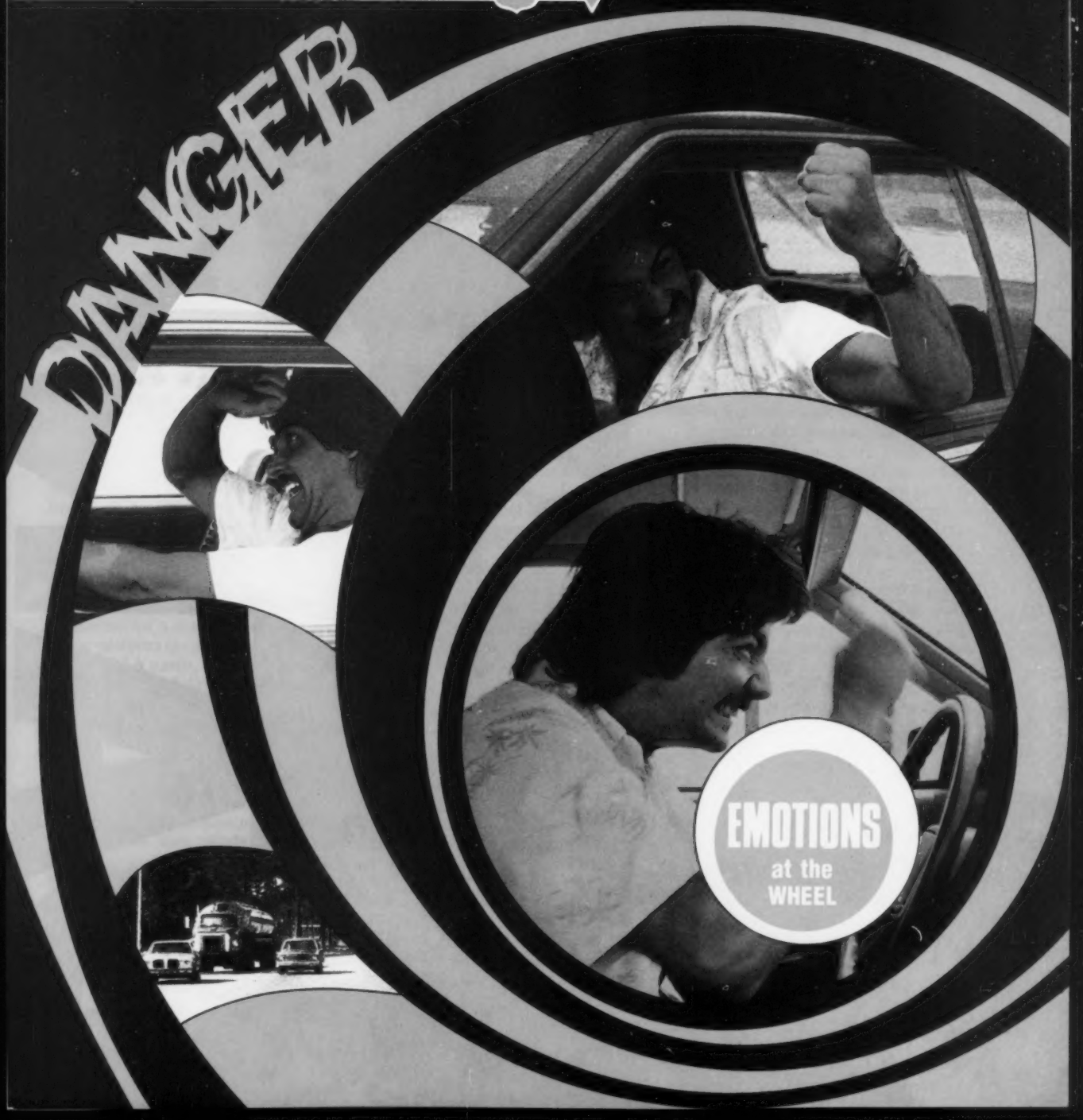
DRIVER

SEPTEMBER
1982

DANGER



EMOTIONS at the WHEEL

DRIVER

DANGER

EMOTIONS at the wheel

Editor's note: The people in this story are real and they are on the highways. Their names have been omitted to protect them. You can protect yourself by watching out for them, and by not following their example.

A driver whom we'll call "A" was going the speed limit in one of the middle lanes of the freeway. A small sports car (we'll call the driver "Z") entered the freeway and pulled in front of A, traveling only about 40 mph. Annoyed, A flashed his bright lights at Z to get him to move out of the way. Instead, Z, more than annoyed, stomped on his brakes and locked them up. A swerved around him, pulled in front and stood on *his* brakes. To avoid the rear-ender, Z went off onto the shoulder.

Z raced to catch up and the two paralleled for a distance, making obscene gestures at each other. Z pulled in front of A again, then A took over the lead and Z followed a minimum distance with his bright lights blazing. They each tried (unsuccessfully) to get the other to rear-end once more.

A was furious now. With traffic thickening, he saw a semi moving along in the right lane. He moved to that lane, with Z following, ahead of the semi. As they climbed a hill, A slowed down. When they went over the top, A, by this time going only about 20 mph, braked to a full stop. Z stopped behind him, and then A roared away, watching in his rearview mirrors for the semi to come over the hill and squash Z to tin foil. Fortunately, Z managed to pull away before the semi reached his spot.

Z totally lost control and gave way to rage. He tried to run A into the center divider, a concrete wall. A avoided this and made an attempt to return the compliment. Z likewise escaped without damage.

At last, perhaps surprised at the extent of their battle, A and Z exchanged a couple of last gestures and A exited the freeway. . . .

No condition: This example, admittedly a pretty extreme one, shows what emotions can do to a person if he lets them get out of control.

If you heard one person remark to another "You're in no condition to drive," you'd probably think the person being addressed was drunk. But that statement could easily be applied to someone who was "under the influence" of his or her emotions. As the above example shows, emotions can be equally as dangerous as alcohol for someone behind the wheel.

Our emotions express who and what we truly are, and they — pardon the expression — "drive" us. The combination of an automobile and strong emotions can cause big trouble.

Dr. Anchard Zeller, psychologist at the Air Force Inspection and Safety Center, writes, "Emotions may vary from acute depression to euphoria (filled with joy). The depressed individual frequently loses appropriate concern for attention to details and in extreme instances may develop pathological conditions conducive to self destruction (may become a high suicide risk). The euphoric individual on the other hand is frequently prone to errors of emotion and failure to attend to pertinent details. The end result of either condition is all too frequently an accident."

Emotional stress simply adds to the stress that is part of driving. Good driving requires quick reflexes, good coordination and constant alertness. It can cause nervous stress, tight muscles and even eyestrain. Add some sort of emotional stress or anxiety and the driver could become prone to hypertension, cardiovascular disease, muscle strains and infections.

Fight or flee: Of more immediate concern than medical problems, however, are the dangers of loss of emotional control and preoccupation (being distracted or lost in thought) that can result when people allow emotions to take over the wheel.

What are the emotions that will affect your driving? One list of the primary emotions is: Happiness, sad-

continued

DRIVER

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FOR THE MILITARY DRIVER

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SEP

VOLUME 16 NUMBER 4

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THE EDITOR SPEAKS

DOUBLE CLUTCH

ALCOHOL + MARIJUANA = DOUBLE TROUBLE

If you drink alcohol and smoke marijuana before driving, are you more impaired than if you had used only one of the drugs? Yes. Dr. Herbert Moskowitz of UCLA has found that one alcohol plus one marijuana equals double impairment.

Dr. Moskowitz says, "Driving is obviously a multitask process. You must be able to do two or more things simultaneously. Alcohol impairs this ability in one way, and marijuana impairs it in another way.

"The alcohol-impaired driver tends to concentrate on one driving element to the exclusion of everything else. By sticking close to the center line for reference, the driver can keep the car from weaving but may be totally unable to attend to any unexpected highway happening.

"The marijuana-impaired driver, on the other hand, appears to have brief total 'dropouts' in his driving attention. Thus, taken together, alcohol and marijuana undermine the ability of the driver to process the roadway information necessary to control the vehicle safely. Drivers under the combined influence of alcohol and marijuana have a greatly increased likelihood of initiating an accident."

Dr. Lawrence Sutton, executive director of Pittsburgh's Institute for Driver Research and Substance Abuse, has done work which supports Dr. Moskowitz's findings. He also found that *none* of the seriously impaired drivers in his study could have been prosecuted for drunk driving since their blood-alcohol concentration was too low and since there is not yet a reliable roadside test for the driver who is high on marijuana. A roadside "pot" test has been announced but proof of efficiency is not yet complete.

danger: emotions at the wheel

continued

ness, fear, anger, surprise, acceptance and disgust. All of these emotions could mess up your driving if they were felt strongly enough.

Emotions affect our behavior. An emotion involves both a feeling and an impulse to perform some action based on that feeling. For example, the feeling of fear will give a person the impulse to run away or to fight. The person will take action based on an automatic response (he may fight because that is how he handles fear) or he might make a conscious decision (he might decide that it is better in this instance to flee).

It is the automatic response that frequently causes the trouble. If the person takes the time to examine the situation and make a conscious decision, he or she may avoid the trouble.

The automatic responses involve, as we said above, loss of control and preoccupation.

Madness: By the loss of control, we mean anger. The Roman poet Horace said "Anger is a short madness." The story at the beginning of this article illustrates this. Either A or Z could have committed vehicular homicide while in the grip of his anger.

Anger steps up the heart rate, blood pressure, adrenaline flow and muscle tension. It's like having all systems in high gear. It can cause too-quick movements and speeding, and it usually causes bad judgment.

Take this person for instance:

He was a chronically angry person. When something touched him off, he exploded like a can with a firecracker under it. One thing he couldn't stand was being tailgated. However, he seemed to seek out those who would follow too closely. He habitually cruised along in the fast lane at or a little below the speed limit and watched in his mirror. When a car began following too near his rear bumper, he stomped on his brakes. When the nose of the following car quickly dipped as the driver slowed to avoid a rear-ender, he accelerated again and continued to watch the mirror.

Amazingly, nobody ever hit his car. However, he did wreck the car when another motorist — even angrier than he was — pulled the same stunt on him. He not only crunched his little subcompact against a full-sized sedan, but he also received a citation from a police officer for following too close. . . .

That could be called "poetic justice." However, it's a bad way to learn a lesson.

Another driver tried a different method of handling the tailgater problem. As he was cruising in the fast lane of a highway, he found a huge four-wheel-drive vehicle following with its bright lights burning in his mirror. He sped up a little, but the 4x4 matched his speed. He angrily jerked his steering wheel to the right and moved over one lane. As the 4x4 passed, he made a quick one-fingered gesture at the other driver.

The 4x4 driver saw it. He was big and mean-looking and suddenly he was also very angry. He jammed on his brakes, perhaps with some idea of stopping his vehicle and dusting off

continued

continued

the first driver. The dense traffic all around made him think better of it. He accelerated again but kept glaring into his mirror. The first driver got off at the next exit and found another way home. . . .

People have been known to use firearms in incidents as minor as this one. Or take this example:

He was driving his sedan through a parking lot, looking for an exit. A couple in a van were driving at 20 mph or so and had to stop quickly to avoid him. The van driver angrily emerged from his vehicle and swore at the sedan driver. At first, the sedan driver tried to calm the van driver, but then his anger got hold of him after the van driver threatened him. He actually tried to run the man down with his car. The van driver got out of the way and the two saluted each other with the internationally recognized hand signal and parted enemies. . . .

Actually, he's lucky that's all the van driver did.

Preoccupation: Driving under some sort of emotional strain is dangerous for other reasons than these angry outbursts. If you drive with your mind preoccupied with the cause of some emotional stress, you exclude thinking about the driving itself.

Then the (body) systems are not only in high gear, they are also on automatic.

Fear: The following example illustrates the other side of the anger problem.

She had left the office too late and now she was stuck in a traffic jam in the middle of the city. The continual starts and stops were annoying, but she knew she'd be there for some time, so she relaxed and watched the traffic carefully. Behind her was a man who couldn't seem to resign himself to the inconvenience. As she watched in her mirror, he got more and more angry and began swearing and pounding his fists on the wheel. She couldn't hear him, but she could imagine what he was saying and it upset her. Then she became actually frightened when he spotted her eyes in the rearview mirror. He seemed to be directing his anger at her. She thought he might get out at any minute and attack. She got so worried that she directed almost all her attention to the mirror. The next thing she heard was a bang as she rear-ended the car ahead of her. . . .

Sorrow: Sometimes sorrow is also too strong an emotion to carry around in the car.

A man had just returned from his mother's funeral and he was driving aimlessly, conscious only of a need to go somewhere, anywhere. His mind was on his terrible loss and he was crying occasionally. He slowed automatically as he approached lighted intersections, only to snap out of it and find the lights were usually green. He cruised without slowing through one intersection, and was promptly stopped by the police. He had spaced out a stop sign. . . .

The driver was depressed. He'd just had a fight with his girlfriend and the two had parted with bad feelings. He didn't want to do anything, least of all drive anywhere, but he had to get home. He drove along a highway, trying not to think about the break-up, but thinking about it anyway. Ahead of him was a line of trucks going slowly up the hill. He approached them at full speed, not seeing them at all. At the last moment he came to and swerved completely off the road into the dirt to avoid rear-ending the last truck. . . .

Obviously, humans do not have a very effective "automatic pilot." As we said, the driver must practice constant alertness.

Happiness: Even happiness can contribute to an accident if it turns on the "automatic pilot."

With his car shining and running well, the young man drove up a winding mountain road. He was enjoying the car's handling through the curves as he followed a fast-moving sports car. He rolled down the windows to let the wind blow through his hair and he put on a tape of his favorite tunes.

While he was on a straight he saw the sports car disappear around a left-hand curve. He accelerated to 60 and thrilled to the roar of the engine. He totally ignored a sign that advised a speed of 40 miles per hour on this particular curve.

As he zipped through the curve with his foot planted hard on the gas he could feel the car slip to the outside of the curve. He let off the gas, but it was too late as the car kissed the guardrail, scuffing the entire right side from bumper to bumper. . . .

Suicide? Sometimes crashes are not accidental but deliberate. Dr. David Phillips of the University of California (San Diego) Sociology Department has speculated in *Science* magazine that often "suicides are disguised and recorded as motor vehicle accidents." Authorities have long suspected this to be true, but they lack the statistics to prove the idea.

Similarly, there are not figures to show the number of violations, accidents or near-accidents that are caused by an excess of emotion.

Take these two speeding incidents for example:

A fellow and his wife were traveling home after a pleasant dinner at an expensive restaurant. The man was feeling good because his wife had been impressed by the evening. Zipping along at 60 mph he felt like Magnum P.I. and the Dukes of Hazzard all in one. Suddenly his shiny little sports car was passed at high speed by a Volkswagen beetle.

More than a little hurt in his pride, he turned to his wife and said "I'm

continued

Self-Expression

More than one commentator has mentioned the supposed invisibility of drivers when they are in their cars. They will sing, talk to themselves and the other drivers, and even display open anger, safe in the (erroneous) knowledge that they can't be seen. They may feel invisible or perhaps *invincible* inside their 2000-odd pounds of metal.

Whatever the reason, people will often drop their inhibitions against expressing strong emotions when they are in their cars. A timid man may become a maniac with 200 horsepower under his right foot. Perhaps they would tone it down a little if they realized what they look like.

How about you? Remember, if you can see them, they can also see you.

Fear: A certain amount of fear behind the wheel might be natural, if you're facing a head-on collision. But if the fear is due to something that distracts you from your driving, you have no business driving.

(left)
Joy: "All the world loves a lover." When you're happy about something, life is great and you don't have even a single worry. You also aren't very safe as a driver when you concentrate on that special girl or your promotion and forget the road.

Surprise: Many things will surprise you as you drive — pedestrians appearing unexpectedly, cars turning in front of you and stuff like that. But concentrating on "I can't believe he said that to me," or "How did she find out about the other girl?" will turn you inside yourself and you'll hit the pedestrian or the turning car.

(right)
Anger: Hurling curses at another driver or beating your hands on the steering wheel may be good in some kinds of therapy, but we don't recommend venting your anger inside an automobile. Anger too often leads to speeding or some other aggressive behavior.

continued

Sorrow: Sadness is as much a part of life as happiness, but tears obscure your vision of the windshield and things beyond it. This is a good example of being "in no condition to drive" and yet completely sober.

gonna blow that so-and-so's doors off." He accelerated to 70, then to 75. He passed the VW and regained the good feeling that had been making him glow.

That feeling lasted for about 10 seconds. A state patrolman pulled him over and the VW went by, its driver smiling in delight. . . .

A young man had just talked to his girlfriend and she was adamant — she was going to marry someone else. He tried arguing with her, but it was no good. Finally, totally frustrated, he went to his car with only a vague idea of where he was going. Once he was moving on the highway in his high-powered coupe, he floored it. He zig-zagged from lane to lane, moving around the slower-moving traffic. He wasn't thinking; he was only aware of a need to go faster.

At one point, he pegged the speedometer and had no idea how fast he was going. For some reason he slowed down before he was spotted by the state police. When he saw the red lights in his mirror, he immediately cooled off and was very polite to the patrolman. Maybe the patrolman was just a nice man. Whatever the reason, the ticket cited him for only 67 mph. . . .

In the first case, damaged pride may have been the emotion, and in the second it was frustration and anger. Both drivers were deliberately speeding and were liable for citations of reckless driving, but both said they "hadn't noticed" how fast they were going.

Few people would admit to authorities they had been driving in the grip of a strong emotion unless they had no choice. But whether we admit it or not, we all occasionally drive when we are too involved with emotions that can hamper our ability to drive safely.

The important question is "How can we control these emotions so they don't cause us to bend up the car or attract the negative attention of the law?"

Self-control: Controlling your emotions for safe driving involves a certain amount of discipline. We need to look for constructive ways to manage our emotions to handle the tensions of driving. Some people have taken up meditation, bio-feedback, yoga and other relaxation techniques to help them cope with stress. If you don't employ these, try the following suggestions.

First, watch yourself. Don't let emotional stress build up to a crisis point. Deal with any emotion while it's a small problem — deal with anger while it's still "annoyance" and don't let it build into "fury."

Avoid situations that will cause emotional stress. Make sure you aren't hurried to get somewhere. Avoid traffic jams if they anger or scare you.

Use physical recreation to blow off excess energy. Don't get in your car and drive to use up the energy. Instead, a workout or a run around the track or a fast game of handball will get your mind off your problems, and it'll make you physically and emotionally more relaxed.

Develop a conscious control of your emotions. This is where the discipline part really comes in. Do something different than what you feel and you may be able to change the feeling. If you feel frightened, act confident. If you feel upset, try smiling. The idea is to put your emotions under the control of your mind.

As Mark Twain said, "When angry, count four; when very angry, swear." We don't necessarily advocate that last part, but it is certainly preferable to the "duel" that A and Z engaged in. Stay cool.

STRANDED

AT THE SIDE OF THE ROAD

What if you run out of gas, break a belt, or for some other reason find your car stopping while you're driving on a highway? What should you do?

First, try to coast off the road onto the shoulder. Turn on the flashers to alert other drivers. Then tie a white handkerchief or cloth to the radio antenna or hang it from the window on the driver's side.

If it's daylight and you're in a neighborhood you know and feel comfortable in, stand by the car, on the side away from traffic, so that a passing driver can see you. Being able to see you may encourage him to stop to help. Truck drivers are likely to stop because they're on the road all the time and have sympathy for motorists in distress.

If the breakdown occurs in an area you don't know, or in the dark, the flashers should be turned on, the white cloth hung out and then you should get inside the car, turn on the dome light and keep the windows up and the doors locked. If another motorist arrives before the police or a service truck, talk through a barely open window and ask the person to call up ahead for a service vehicle.

CB radios are not as popular as they once were, but if one is in your car you should call in on Channel 9 or 19, both of which are often monitored by truck drivers and police. When you get a response, give your location, describe the vehicle and outline your problem.

Remember that in a situation like this, the most important consideration is your personal safety.

THE GREAT DRIVER MAGAZINE

Drinking Rode Test*

☐

☐

☐

* Never, ever drink . . .

☐

and drive

There are people who object to any assumption that one can drink a little and still drive safely. They object because the first part of the brain affected by alcohol is the part with which we make judgments. If we try to determine how much we can drink and still drive safely, we are using judgment and our judgment isn't reliable because we've been drinking!

Perhaps that problem can be overcome by setting our drinking limits while we're cold sober and then filing those limit numbers in our brain, to be referred to when the partying begins.

Words of caution: First, once we begin to drink, we may well choose to ignore that cold-sober resolution to limit ourselves to one drink an hour, or whatever our weight can handle. Alcohol can override our most noble resolutions, made when sober.

Second, the use of marijuana or any other drug — whether illegal, prescription or over-the-counter — in addition to alcohol cancels out all presumptions of our tables. Alcohol affects our ability to perform certain driving tasks. Other drugs affect other abilities essential to driving. A little of this substance and a little of that one and we can't drive. Period.

DRIVER isn't going to tell you how much you can drink and still drive safely. No one can really do that because many people with no outward signs of intoxication may have impaired driving abilities. In truth, DRIVER — and the long arm of the law — can only measure the level of alcohol in your blood; but in the end, only you can make the serious decision to drive or not. Make the wrong decision with your judgment impaired by alcohol and you can end up on the wrong end of the law, injured in an accident, dead or having injured or killed somebody else.

Some definitions: The tables on these pages are strictly objective, with personal influences filtered out as much as possible, just like other car magazine road tests. Except this test is of people not cars, so it is a rode test.

The charts are built around BAC or Blood Alcohol Content, also known as BAL or Blood Alcohol Level. This is the amount of alcohol in your system measured in grams per 100 milliliters of blood. The BAC can be accurately measured by a breath, urine or blood test. While legal limits vary from state to state (see "Drunk Driving Laws," July 1982 DRIVER), a BAC of less than 0.05 is usually considered "sober" while levels of 0.10 or higher presume driving impairment.

Body weight, food or liquids in the stomach affect how fast alcohol is absorbed into the blood system. Once alcohol is into the blood system, however, the effects on the brain are usually equal for an equal amount of alcohol (BAC). While a heavy drinker may develop the ability to "handle" liquor more than a light or infrequent drinker, the effect on the brain is much the same. The heavy drinker has simply learned to mask the visible effects.

The effects of alcohol at various BACs are reflected on the "Handling Characteristics" chart.

The beer, wine, dry martini and mixed drink charts have two scales: Full Acceleration and Cruising. The Full Acceleration scale is the total effect that number of drinks will have on BAC without regard to time. In other words, if you chug six beers and weigh 166 pounds, your BAC can be raised to 0.158. Cruising scales show the BAC results of drinking one drink per hour. That same six-pack consumed over a six-hour period will leave you with a BAC of 0.083.

As we said, time does have a relationship with your BAC level. Your liver detoxifies alcohol and gets it out of the body at a rate of about 0.015 BAC an hour. This relationship can be seen on the Deceleration Table.

For example, if you chugged those six beers in one hour, you would have to go more than seven hours without another drink before your BAC

continued

GARVEY
Come with me, my long-eared friend. Before we join our chums at the picnic grounds, let us purchase a snort at this booze emporium and prepare ourselves for the softball game, the frolicking kiddies, and any snake bites we may suffer.
Careful, m'boy, you nearly tripped on that al-a-min-yum beer can . . .
What are you drinking, Garvey? A martooney, you say? Made with rye whiskey??? Sounds delicious! Did you hear that, bartender? A rye martooney for my *Oryctolagus Cuniculus* pal and for myself . . . a pitcher of scotch.
What are you staring at, man? Haven't you ever seen a 26-foot invisible rabbit wriggle his proboscis?
GODFREY DANIEL!
The peasants are taking over the world!
BAR

continued

would approach the 0.05 "sober" level. It would be 10 hours after quitting before your BAC would be near zero.

Summary: If the charts and tables are too confusing, consider 100 people drinking beer at a picnic. After the first beer five people are already too intoxicated to drive but nobody is showing any signs of intoxication. Following the second beer 15 people are too drunk to drive and five people appear drunk. Three beers and 35 people are too drunk, but only 10 look that way. Four beers down and 65 shouldn't drive, however there are only 20 that you would recognize as being too drunk to drive. After five beers somebody should call a bus for all 100 drinkers as they are all too drunk to drive. Sadly, only 40 of the 100 are showing signs of intoxication.

In other words, 60 percent of the people who drink and drive may not show visible, outward signs of intoxication, but are too drunk to drive.

BAC

HANDLING CHARACTERISTICS

0.00 — Sober as a judge
0.03 — Mildly relaxed, existing mood slightly changed
0.06 — Mentally relaxed, fine skills slightly decreased, less concerned with surrounding environment, skin flushed, inhibitions begin to disappear, heart speeds up, gaiety
0.09 — Behavior exaggerated, talkative, noisy, moody, loss of good judgment, remaining judgment slowed, giddiness, coordination a bit off
0.12 — Clumsy, serious loss of judgment, serious loss of coordination, vision blurred, speech fuzzy, reaction time slowed
0.15 — Staggering, speech slurred, uncoordinated
0.18 — Obviously intoxicated, grossly uncoordinated in all behavior
0.21 — Grossly intoxicated, all physical faculties impaired, all mental faculties impaired, loss of balance, double vision
0.24 — Falling toward alcoholic stupor and coma
0.30 — Semi-stupor, coma may occur
0.35 — Surgical anesthesia, minimum death level for one of 100 people
0.40 — Death level for 50 out of 100 people
0.50 to 0.80 — Breathing and heart action slow; death occurs

BEER

Volume per drink: 12 oz.

Calories per drink:
Regular: 125-170
Light: 70-115

FULL ACCELERATION
(Number of drinks: BAC)

#	137-lb. woman	166-lb. man
1	0.032	0.027
2	0.064	0.053
3	0.096	0.079
4	0.128	0.105
5	0.160	0.132
6	0.192	0.158
7	0.225	0.185
8	0.256	0.205

CRUISING
(one drink per hour: BAC)

hr		
1	0.032	0.027
2	0.049	0.038
3	0.066	0.049
4	0.083	0.060
5	0.100	0.072
6	0.127	0.083
7	0.135	0.095
8	0.151	0.100

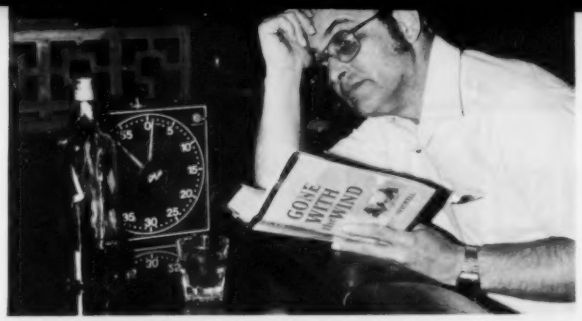
WHY

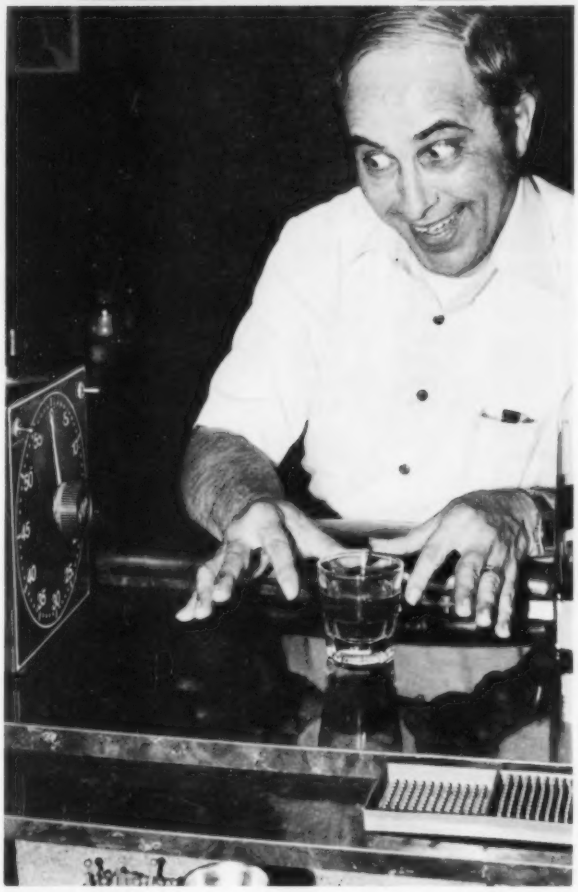
a 137-lb. woman and 166-lb. man?

Because these are the 50th-percentile weights of the "average" Americans — half the population weigh less than these weights.

To reflect how weight affects BAC, listed below are the BAC's for various weights of a six-pack of beer at both "Full Acceleration" and "Cruising."

WEIGHT (in lbs)	FULL ACCEL-ERATION	CRUISING
100	0.264	0.189
120	0.219	0.144
140	0.188	0.113
160	0.160	0.085
180	0.146	0.071
200	0.131	0.056
220	0.120	0.045
240	0.110	0.035





WINE

(12% alcohol by volume)

Volume per drink: 5½ oz.

Calories per drink: 150

FULL ACCELERATION
(Number of drinks: BAC)

#	137-lb. woman	166-lb. man
1	0.036	0.028
2	0.071	0.055
3	0.107	0.085
4	0.142	0.110
5	0.178	0.140
6	0.214	0.170
7	0.249	0.195
8	0.284	0.220

CRUISING
(one drink per hour: BAC)

hr		
1	0.036	0.028
2	0.056	0.040
3	0.077	0.055
4	0.097	0.065
5	0.118	0.080
6	0.139	0.095
7	0.159	0.105
8	0.179	0.115

DRY MARTINI

Volume per drink: 3 oz. **Calories per drink: 205**

FULL ACCELERATION
(Number of drinks: BAC)

#	137-lb. woman	166-lb. man
1	0.035	0.028
2	0.069	0.057
3	0.103	0.085
4	0.138	0.113
5	0.172	0.142
6	0.206	0.170
7	0.240	0.199
8	0.275	0.227

CRUISING
(One drink per hour=BAC)

hr	(woman)	(man)
1	0.035	0.028
2	0.054	0.042
3	0.073	0.055
4	0.093	0.068
5	0.112	0.082
6	0.131	0.095
7	0.150	0.109
8	0.170	0.122

Drink up, Garvey!
As the gentle breeze said to the hurricane: "Let's blow this firetrap, big fella . . ."

continued

continued

MIXED DRINKS

made with 86 proof whiskey, rye, vodka, rum, gin, tequila

Volume per drink: varies
alcohol portion: 1½ oz. "jigger"

Calories per dirnk: varies
alcohol portion: 105

FULL ACCELERATION (number of drinks: BAC)		CRUISING (one drink per hour: BAC)	
# 137-lb. woman	166-lb. man	hr	
1 0.034	0.028	1 0.034	0.028
2 0.069	0.057	2 0.054	0.042
3 0.103	0.085	3 0.073	0.055
4 0.139	0.113	4 0.095	0.068
5 0.173	0.141	5 0.113	0.081
6 0.206	0.170	6 0.131	0.095
7 0.242	0.199	7 0.152	0.109
8 0.276	0.227	8 0.171	0.122

ODDS

Half the drivers involved in fatal accidents have been drinking. So if you drink and drive, what are the odds that you are going to be involved in an accident? To find out we asked our odds maker, Ronnie The Bookie. This is what we were quoted as the probability of having an accident.

BAC	
0.03	5 to 1
0.06	5 to 2
0.09	Even
0.12	1 to 3
0.15	1 to 5
0.18	1 to 15
0.21	1 to 40
0.24	Sure Thing!

TIME

DECELERATION FROM BAC OF:	MINIMUM TIME TO "SOBER" (0.05 BAC) HOURS	MINIMUM TIME TO "DRY" (0.00 BAC) HOURS
0.30	17	20
0.27	15	18
0.24	13	16
0.21	11	14
0.18	9	12
0.15	7	10
0.12	5	8
0.09	3	6
0.06	1	4
0.03	0	2

Don't worry about my BAC, Garvey. A little bourbon and cognac is good for what ails you. I'm forced to crawl anyhow, what with the 2-door pagoda having a flat tire and running out of petrol at one and the same time. AHA! Here we are m'boy . . . Our happy friends and the annual beer, hot dog and potato salad festival.
That's the spirit. You set up the keg while I go find a sucker to fleece in a game of ping pong. Yes, indeedy.
Lost every centime, Garvey. Ran up against a flim-flam man with more garbage than the city dump. Every time I pinged, the rascal overpowered me with the most awesome pong you ever saw . . . DRAT!
Well, back to the old BAC, chum . . . cheers!
BEER
PICNIC
KELLEHER

Time to leave, Garvey. Somebody drank all the beer.

So you're still worried about my BAC, eh? Think the old timer's had too much sauce to drive a car do you? Let me tell you something, Garvey, YOU'RE RIGHT! The gendarmes would have me in the bastille in a nonce. It would break my poor old mother's heart. So I'll drive you instead. You're 26-feet tall and strong as an ox. Pick me up, Garvey, and let us return from whence we came. Upsey-Daisey!

And let me tell you something else,

You've gotta be the dumbest looking rabbit I ever saw . . .

Make that: MUSH on the rocks!

It Could Be A Matter Of LIFE AND DEATH

The Most Important TRIVIA Quiz Ever

1. This octagon (eight)sided) sign means you must:

_____

_____

2. A diamond-shaped sign is a _____ and tells you

_____

_____

3. When you see this triangle shape you

_____

_____

4. Round signs mean

_____

_____

5. A pentagon-shaped sign tells you

_____

_____

6. Horizontal rectangle shapes are _____ signs. They give you

_____

_____

7. Vertical rectangles are generally used for _____ signs that tell you

_____

_____

8. A pennant shape sign on the left side of the road is there to

_____

_____

9. A red ball with horizontal white bar means

_____

_____

10. A red circle with a slash means _____. The symbol behind the slash tells you

_____

_____

11. Match the colors with their meanings.

Red	**A** Regulatory.
Yellow	**B** Guide information such as distance or direction.
Blue	**C** Public recreation areas and scenic guidance.
Green	**D** Stop, yield, do not enter or wrong way.
White	**E** General Warning of what to expect ahead.
Black	**F** Warning of construction and maintenance.
Orange	**G** One-way traffic and weight stations.
Brown	**H** Information about motorist services along the road.

12. How do you rate yourself as a safe driver?

_____

ANSWERS

1. The octagon (eight-sided) shape always means stop. When you come to it, you must make a complete stop at a marked stop line before entering the intersection. If there is no stop line, stop before entering the crosswalk on your side of the intersection. If there is no crosswalk, stop before entering the intersection at a point from which you can best see oncoming traffic. After stopping, you must not start again until you yield the right-of-way to pedestrians and closely approaching traffic if it is on an intersecting through highway. If it is a four-way stop, await your turn. In either case, you must wait until a safe interval occurs.

2. A diamond-shaped sign is a warning of existing or possible hazards on roadways or adjacent areas. It is yellow or orange and has black letters or symbols. They tell you what to expect ahead, so be alert.

3. When you see this triangle shape you yield. You must slow down to a speed that is reasonable for existing conditions and stop if necessary for safety. After slowing or stopping, you must yield the right-of-way to other vehicles in the intersection or those approaching closely on another roadway.

4. Round means railroad crossing. It is posted from 400 to 700 feet in front of the tracks in rural areas. This sign tells you to look, listen and slow down, because you may have to stop. Roll down the car window — if the wind is in the wrong direction, you may not hear the train. If a train is approaching, STOP! Don't try to figure time and distance . . . you'll never have another chance if you figure incorrectly.

5. A pentagon (five-sided) shape tells you there is a school zone or school crossing ahead.

6. Horizontal rectangle shapes are guide signs. They give you special information, usually a location or direction.

7. Vertical rectangles are generally used for regulatory signs that tell you the law — what you must do.

8. The pennant-shape sign is placed on the left side of the road to supplement rectangular "No Passing" signs on the right side.

9. A red ball with horizontal white bar means "Do Not Enter."

10. A red circle with a slash means NO. The symbol behind the slash tells you what's prohibited such as U-turns, left turns, trucks, etc.

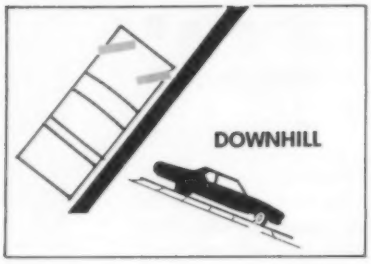
11.

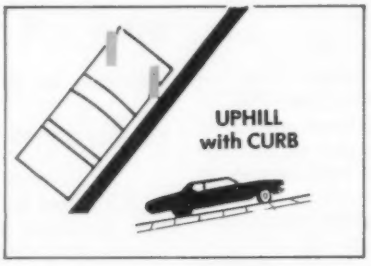
Red = D	**Yellow = E**
Blue = H	**Green = B**
White = A	**Black = G**
Orange = F	**Brown = C**

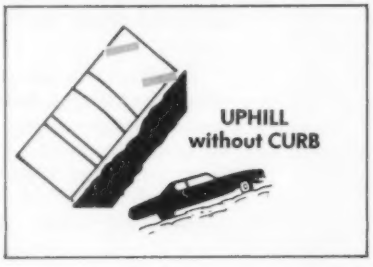
12. How do you rate as a safe driver? If you answered all the questions correctly you're off to a good start as a safe operator. If you didn't get even one right, you'd better consider not driving until you get your act together. In fact, if you didn't score 100 percent you'd better study the answers closely — better that then to have an accident.

If you were so annoyed by the quiz that you tore it up and ate it, there's an excellent chance that you have the aggression needed to be the DRIVER Magazine Feature Editor. But don't call us, we'll call you.

One note of caution: If you passed at sign shape #9 and didn't have or cause an accident, you're lucky . . . unless your luck has run out since then. If, on the other hand, you did have or cause an accident, you now know why — why you had the accident and why the sign was there.







JACK and JILL

PARKING ON A HILL

Our subject here obviously forgot to use his parking brake on this hill and his car is coming to remind him of it. However, even if he had remembered, the car might have moved anyway because parking brakes don't always hold, especially on very steep hills.

When you're parking on a hill always set the parking brake and put your transmission in reverse or first gear (on a manual) or park (on an automatic). But that's not all.

When parking facing downhill, turn the wheels to the right, allowing the car to roll forward until the tire contacts the curb. If there is no curb and the car moves, it will roll off the roadway.

Parking facing uphill is a little different. Turn the wheels far to the left and let the car roll backward until the back of the front tire contacts the curb.

If there is no curb, turn the wheels to the right. That way if the car rolls backward, it will go off the road rather than into traffic.

now's the WRONG TIME to LEARN

Typically a motorcycle rider must detect a traffic hazard, decide what action to take and then react in less than two seconds. Yet in a recent motorcycle accident survey it was found that two out of six riders did nothing — they just rode into the collision. Of the four riders that did take action, three chose wrong! A good, hands-on motorcycle training course probably would have helped these riders. By the way, when was the last time you attended such a course?

HOW IT HAPPENS!

An airman first class is driving his car at "a high rate of speed" when he comes to a sharp right hand curve. Because of his speed, he skids into the opposing lane. An approaching pickup truck, also speeding, collides with the airman's car. The airman is killed and the occupants of the pickup are both injured.

The pickup driver is charged with driving while intoxicated and excessive speed on a curve.

Think about that. The pickup driver was drunk and he was speeding. Yet, if the airman hadn't also been speeding, he would have escaped the collision. It makes you wonder how many drunks are out there.

DON'T BE FOOLED

An advertisement headlining a 200-mile-per-gallon carburetor has been popping up in publications around the country lately. It's an impossibility, but it's just the latest and most outlandish of a host of "miracle" gadgets and additives which are being hustled by promoters, warns the Automotive Information Council.

Says an official of the Environmental Protection Agency: "The one thing I can say on all the testing we've done on these things is they don't help. These guys are preying on the hysteria of the population. It annoys me the public is this gullible."

A car owner seeking better gasoline mileage would be far better off if he spent the money for a proper tune-up. These promoters resurface every time there is a fear of a fuel shortage or of a hefty price rise. There is no shortage, but petroleum analysts are predicting additional price increases by year's end.

LEMON BILL

Connecticut's governor has signed into law the nation's first "lemon bill." It requires auto makers to give a refund or a new car if a buyer is still having a problem after four attempts to get a malfunction fixed or if the car is out of service for more than 30 days in one year under the basic warranty. Similar bills are pending in other states, although such laws are not easily passed because of heavy lobbying against them.

DRUNK-DRIVER DEVICE

Automotive News reports that the government is nearing the end of an experiment that may lead to technology that will keep alcohol-impaired drivers off the road.

Called the Drunk Driver Warning System, the unit uses a brief in-vehicle steering competency test to determine if the driver is capable of operating the vehicle. If the driver fails the test and attempts to drive the vehicle anyway, the emergency lights flash and the horn beeps at one-second intervals if the vehicle reaches a speed of 10 MPH.

Using principles developed with pilot and astronaut testing procedures, the heart of the unit — the Critical Tracking Test — has a display with a centered indicator needle. When the driver gets into the car and turns on the ignition, the car's emergency flashers start, the meter activates and the short test begins. By turning the steering wheel, the driver must keep the wavering needle centered. If he passes the test, the flashers turn off.

Ten 1978 Chevrolet Novas have been equipped with the devices. Two courts in Los Angeles involved in the test assign the cars to drivers who have been convicted of drunk driving for the second time. Ordinarily these drivers would have their licenses revoked, but if they participate in the program they are allowed to drive the specially equipped vehicles for six months. (Participation does not, however, erase the second conviction.)

Fleet operators, particularly rental operations, may be interested in this equipment as a way of lessening their exposure to drunk drivers. For individuals, it would make sense if insurance companies would lower their rates for cars with the equipment. The test vehicles are adjusted to the driver's weight, so no one else can take the test or even operate the vehicle without flashing lights and beeping horn. The system could be adapted to vehicles used by more than one person by use of a key resembling a credit card. The magnetic tape on the card would identify the user and calibrate the Critical Tracking Test to the driver's pre-programmed abilities.

AIR FORCE TIMES GOT IT WRONG

To all of you who responded to our "Make It Click" program on the basis of an article you read in *Air Force Times*, we regret to tell you that the newspaper got it wrong. We are soliciting seat-belt-save experiences that *occurred in 1982*. We cannot send T-shirts to those who sent us descriptions of accidents that happened before last January. This point was clearly made in both *Driver* and *TIG Brief*. We're sorry because some of those old stories are really good. One officer sent us a description of an accident that happened when he was a toddler and was saved by his car seat!

Incidentally, the response to "Make It Click" has been terrific. We have run out of T-shirts and are waiting for another shipment. If you have one coming, please be patient. You will get it.

2000 Hands On

Castle AFB, Calif., recently graduated its 1000th student from the Motorcycle Riders Course, Maj. Bob Muir. While the motorcycle population of the central California base has grown 200 percent in the three years of "hands-on" rider training, the accident rate has been cut by more than half. Check with your local base safety officials for the date and place of the nearest course.

tteecchh double tech with tsgt ron lathrop

In the April 1982 issue I asked "if any readers have similar problems for which they have found a cure, let me know," regarding a mystery thump. Here's what I got for replies.

COMMENT: We had this thump in a four-wheel-drive utility vehicle and nobody could figure it out. We'd step on the brake — all's fine — and as the truck neared the stop, there'd be this distinct thump. Finally we had another brake repair outfit look at it while they were doing something else to the vehicle. They reported that a brake lining was installed the wrong way around. They corrected this condition, and the thump — after we'd suffered it several years — was finally gone!

COMMENT: I chased a similar noise for several months in an almost new car a few years ago. The noise would never appear when near the auto dealer. I searched the car from end to end to no avail. The thump and/or grind would still appear. To make a long story short, the noise went away about 120 miles from home as we began our vacation. The right front wheel bearing froze up. This little noise was pretty costly, because the rotor and spindle both went with the bearing. Plus, we had to spend our first day of vacation in the waiting room of a repair shop.

COMMENT: I also had a similar thump, and being a female driver, I couldn't find a mechanic (and even my best friend) who could find the source. No one could "hear" what I heard and felt. Finally, one person heard the thump while the hood was up (the car was being driven out of the garage) and he told the driver to move the car and apply the brake. The trouble was not under the car, but under the hood. It was the upper arm bushing. This was easy to repair with only minor surgery and some new parts. Now, my car brakes quietly and smoothly, and the front wheels won't fall off.

REPLY: Thanks readers, and letter writers — I hope we're on the right track.

COMMENT: I recently experienced an unusual problem with my car. It seems that every time it rains, it doesn't want to start. We changed the coil and plug wires to see if there was an electric leak/short there, also the rotor cap . . . still a problem. The car starts OK when the air is dry.

REPLY: Start with some waterproofing spray on the wires. However, I think your real problem may be moisture keeping the rotor from properly grounding to the distributor shaft. Remove the rotor and check the metal grounding tab to make sure it is dry and not covered with plastic that could trap moisture.

COMMENT: Why are you promoting larger cars ("Larger Is Safer" appearing in the June 1982 issue), in an age when most prudent and responsible persons are driving mid-size and smaller automobiles? Wouldn't it be inherently safer for all of us if efforts were concentrated on getting the behemoths off the road?

REPLY: We aren't promoting big cars. We're trying to convince our readers that the small car is inherently more dangerous than the larger one and therefore requires more skillful driving plus faithful use of belts.

There are two myths about small cars. One is that the small car is dangerous only because it loses in any collision with a larger one but this unfairness will be taken care of when the last old sedan goes to the junk yard. On the contrary, the small car gets into most trouble in the single-vehicle accident — running off the road into a fixed object, for instance. The little vehicle doesn't have the energy-absorbing qualities of the bigger one. To put it bluntly, when a small car runs into a tree or a bridge abutment, the human body has to take the crash forces the car can't take. Similarly, when a small car hits another small car, the passengers' bodies take the forces the cars can't.

The second myth is that the small car is more maneuverable and so can be "driven out" of potential accidents. A small car *can* be very maneuverable, but it depends more on tires and suspension than on size and many small cars are not particularly maneuverable. Even when they are, most drivers are not skilled enough to take advantage of what the car can do.

In summary, small cars account for less than 40 percent of the vehicles on the road and 55 percent of the deaths. By 1986 about half the cars will be small and the death rate is expected to be far higher. It doesn't have to be that way. People need to learn how to operate small vehicles safely and to buckle up.

Besides, how are you going to get the behemoths off the road? Sell or trade yours in? That doesn't get it off the road — it just changes who is riding in it.

EDITOR'S NOTE: If you have a general interest automotive question that you would like answered, and feel others could use the knowledge also, send it to:

Double Tech
DRIVER Magazine
HQ AFISC/SEDD
Norton AFB, CA 92409

Buying an AWESOME Used Four-Wheel-Drive part 1

"Anyway, he like goes, 'Are you into a new four-wheel-drive?'

"Could you like picture me making like big *payments? I'm sure; no way! Like freak me out.*

"Like really sad. Like the salesman, he's like, he's like a total space cadet. We're talking chrome, paint, leather space cadet. I'm so sure. He's like so gross. Like he sits there

Always look at the vehicle in sunlight — it penetrates deeper than artificial light while you're taking a long walk around to check the skin. Having a friend along is also helpful.

and plays with all the levers and flirts with me. It's like totally disgusting. I'm like so sure. Like barf me out; gag me with a spoon.

"Oh migosh! I'm getting a used four-wheel-drive. That's going to be like really, like a lot of money – I'm freakin' out, I'm sure. But, I don't know; like it's going to be like so cool, you know. Like see my 4X4. Like real cool, except like my payments are like smaller.

"So awesome; it's like tubular, you know. I'm not like really sure. It's just like – like I don't know. Like, how can I buy the neatest used four-wheeler and stuff?"

Finding a used four-wheel-drive that's really "bitchin' " that you can also afford is no easy task. To help you solve this woe, follow these suggestions. You'll notice that many of them are questions that you should ask yourself. If "self" doesn't come up with the right answers, tell the seller, "Ah, I don't think I can handle this, you know." Then look for a better buy. OK, fine!

Get as close to the body as you can and sight down all the panels. Are there any ripples or waves? If you see something that doesn't look right, give it a good healthy rap with your knuckles. A thud instead of a metallic sound screams "body repair."

Does the paint match? Does it match under the fenders, too?

Rust? Check door openings, rocker panels, fender panel bottoms and around moldings. With a screwdriver, remove headlight trim panels and taillights. Now look inside the fenders for signs of damage and rust.

Do the doors sag when opened? Do the doorjambs provide clues to a recent repainting? Have the doors been replaced? Are there any service tags from oil changes or have they been removed for repainting? Do the windows operate properly? How about the doors; do they open with ease? Does one key work in both doors?

continued

How's the suspension respond when you push down on top of the fenders? Are there any squeaks and clunks? Is the fender loose?

How are the tires? Bald spots, uneven tread patterns or one-sided wear tell a lot about unseen problems. And don't forget to check the spare.

Are there signs of rust under the floor mats or rugs? While you're under there, look for collision ripples.

(right)
Do all the seats adjust to fit you? More importantly, do all the belts? And what's the condition of the seats and belts?

continued

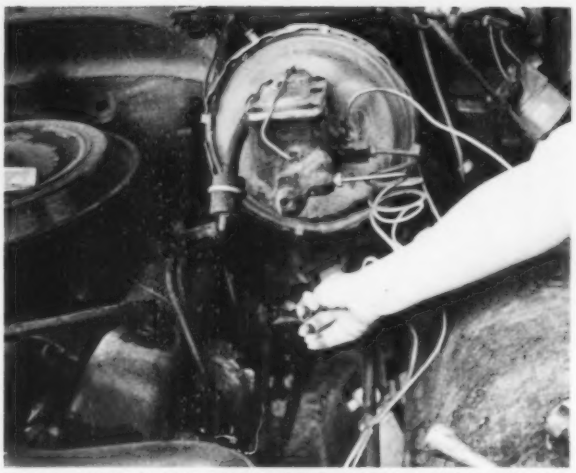
(left)
Does every interior gadget work? Lights, radio, etc? Do any knobs come off in your hand? How about the heater and air conditioner? The temperatures go up and down as directed, don't they? And the controls work freely, too?

(below)
Is the wiring under the dash tidy or are there signs of damage and re-wiring?

continued

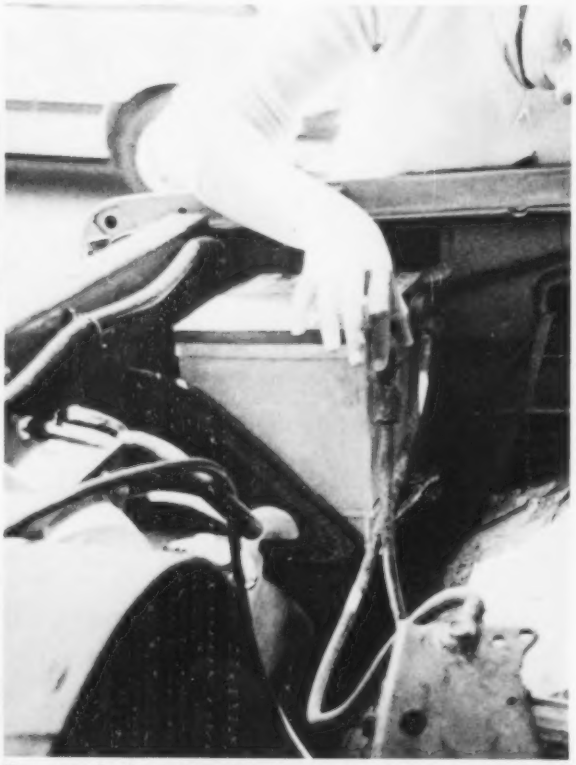
continued

Under the hood, steam cleaning and new engine paint would be nice, but. . . . Take your time; listen to what your ears hear and see with your hands as well as your eyes.

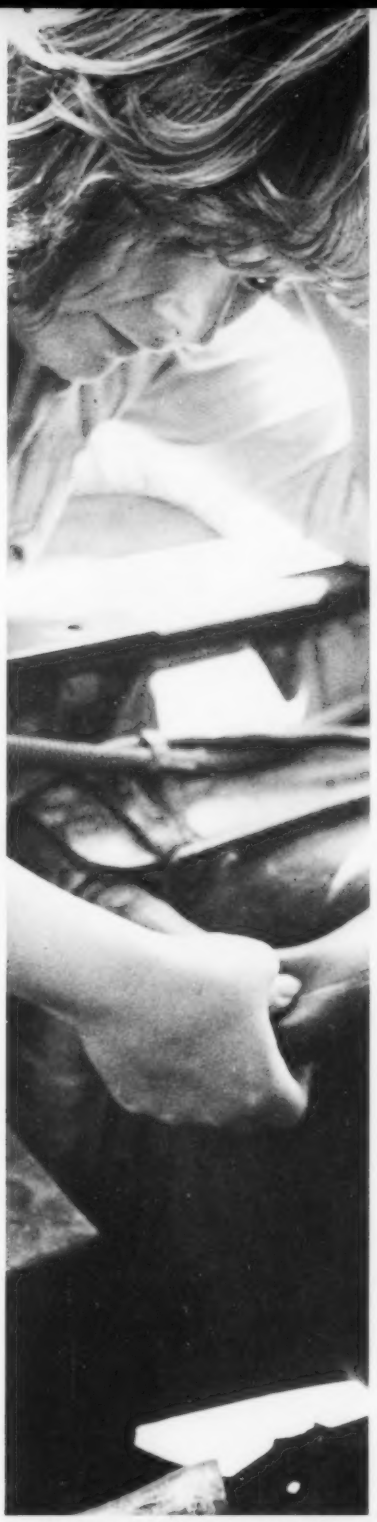


Are any of the fluid levels low? Battery? Oil dipstick? Power steering? Brake reservoir? Hydraulic clutch? Transmission dipstick? Others?

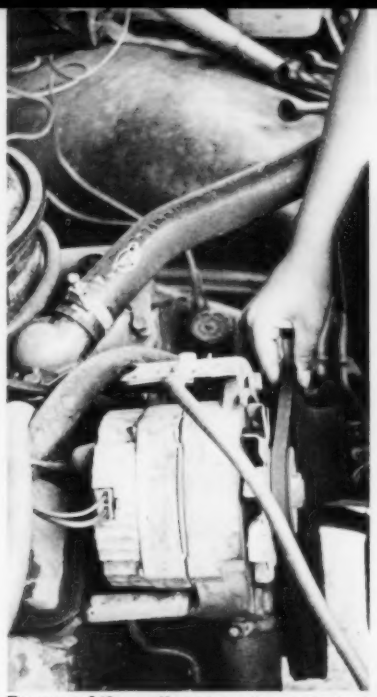
(left)
Is the air cleaner clean? Is there oil in the housing or on top of the carburetor? Is the carburetor gummed up? Does the linkage move freely?



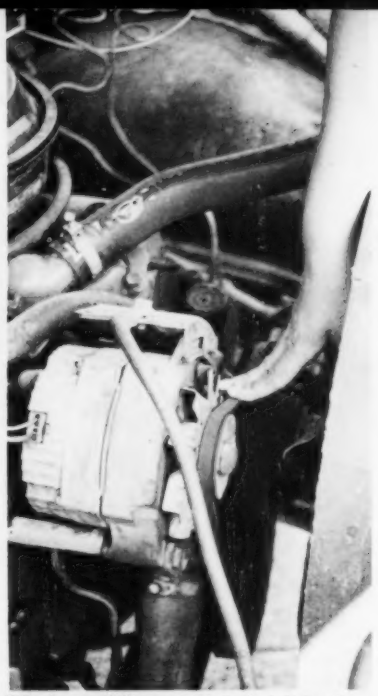
How now is the battery? Is there a lot of corrosion around it? Did jumper cables leave marks on the terminals?



Are there rust stains around the radiator, water pump, hoses or freeze plugs? Are the hoses new? Leaking? Cracked? Brittle?



Do any of the pulleys have too much play? Grab each one and try to pull it in, out and side-to-side.



What condition are the belts in? Are they craked, frayed, or glazed? Is their tension correct?

Does the tailpipe hit anywhere or rattle when you shake it? Are all the exhaust joints tight? Can you crush the tailpipe with pliers by squeezing gently? Can you punch holes in it? How about the muffler?

Don't be afraid to get under the vehicle to look for fluid leaks. But if you jack it up, don't get under it without placing jack stands properly!

Is there oil on the undercarriage? How much is coming from where? And is it going to mean a major repair to stop it?

Are there any suspension parts that look newer than others? How about signs of distortion or wear?

(left) The biggie: check each brake — carefully. Are there any leaks? What condition are the rotors, drums and backing plates in?
(middle) Are all the rubber parts in good condition? Cracked? Brittle? That's all rubber parts including: bushings, brake lines, fuel lines and motor mounts.
(right) Is there excessive play when pushing or pulling — up and down, in and out — on driveshaft and power transmission shaft seals? Do any make noise? Are the seals leaking? What condition is the shaft in? Bent? Dented? Rebalanced numerous times?

With the vehicle off the ground, do the wheels turn smoothly? Can you wiggle them top-to-bottom or side-to-side?

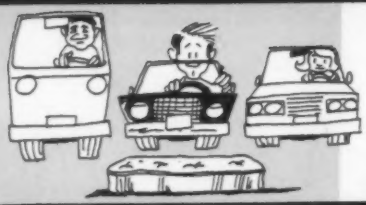
for the record

Anybody who buys a used vehicle without having it completely checked out by a reputable independent test center is only slightly short of crazy. These centers not only tell you how safe and sound the vehicle is, but they also thoroughly check the basics such as the front-end, suspension system and brakes. Additionally, diagnostic testing tells the exact tune and internal condition of the engine.

In next month's DRIVER, you'll actually start the engine and test drive those four-wheel-drive vehicles that passed your first set of tests.

Special thanks to Nancy Taylor and Rene Vanderhoft. Vehicles courtesy of Dave Baer, 2nd Lt. Randy Taylor and Kevin Trapani.

Backfire
LETTERS to the EDITOR



BETTER ANSWER

Your "In and Out of Tight Spots" in the May 1982 issue was an especially good article. Hopefully you will offer articles like this periodically.

Unfortunately, I must disagree with your solution on page 8 where one comes upon a mattress 25 yards ahead while doing 55 mph in the number 2 lane with cars on both sides. I had this exact situation occur (except it was an eight-lane freeway) and I reacted just as you recommended. I passed over the mattress which wedged under the transmission. By the time I was able to move to the right shoulder, the mattress had ignited, either from the muffler or the friction of the highway surface. Despite the use of my car fire extinguisher and that of a quickly-responding Highway Patrol officer, the engine caught fire and my car was totalled before a nearby fire department arrived.

I suggest that a better answer is: Honk (to alert cars beside and behind), pump brakes hard to stop and steer straight ahead (this should warn the driver(s) behind and may keep you from driving over the mattress if the front end noses down enough). Although I don't like stopping in the middle of a highway, I think this case would be one of the few exceptions. You could then go over the mattress with one side of the car or try to push it to the roadside, depending on traffic conditions. Also, if you had the presence of mind in this emergency, you could turn on your emergency flasher.

In any case, don't let a mattress stay wedged under your car, particularly if you have a catalytic converter unit. At the first opportunity, back off the mattress (I did this, but the engine was already on fire) or pull it out from the front end of the car.

Edward S. Houston
Los Angeles AFS, CA 90009

PANDORA'S BOX

You guys sure know how to open "Pandora's Box" when it comes to putting subjective judgment into print (refer: "In and Out of Tight Spots," May 1982 DRIVER). And your comedy writers are pretty good, too.

If I may be permitted to disagree with you, however, on the "great mattress caper" pictured on page 8: a. judging by the dashboard, "we" are driving a small (British) import; b. hitting that folded mattress is at the very least going to remove the front wheels from contact with the road, if not remove the front wheels altogether; c. Checking the rear-view mirror, there appears to be time and space to brake sharply enough to let a lane clear either left or right and steer around it; d. my rear-view also shows several hundred feet of straightaway behind me . . . how did I get this close without seeing it in the first place? (I know, the driver on the left was female wearing short shorts . . . right?)

Seriously, the May '82 issue was one of the best in some time.

"Too Close for Comfort" brought back memories of my first line-of-duty investigation; was the Air Force rider on board a (brand deleted)? My own experience revealed a bad tendency toward steering wobble with that particular bike.

"Up on Tires" provided an excellent refresher course on care of that increasingly expensive item.

And I couldn't help but admire TSgt. Young's outstanding grasp of the laws of natural selection on the Backfire page. Brutal as it may initially sound, I think he's on the right track. The sooner we begin taking responsibility for our own actions, stupid or otherwise, the better off we'll all be. (And yes, I DO wear my M/C helmet in a "nonlegislated" state.)

Keep up the good work, and be sure to let us all know if there is any indication that your authority to continue publication won't be renewed by October 1982.

Lt. Cmdr. F.R. Barber, USN
Sun Prairie, WI 53590

Most motorcycle steering wobble complaints can be traced to bad bearings or improper tire inflation – even on those bikes with supposedly bad reputations.

CYCLIST PACE

MM3 Kelly's letter concerning bicycles on the highway (March 1982 DRIVER) had one irritating paragraph. He is apparently not very aware of a cyclist's capabilities, for he describes 25 or 30 mph on a bicycle in a 45 mph zone as "very hypothetical."

A person who has never ridden a bicycle can get on one and after learning balance easily sustain a 15 mph pace.

When I separated from the Air Force, I rode from Marysville to Sacramento, Calif., approximately 45 miles. Highway 99 is level the entire way. At several of the mile markers, I was mildly surprised to see that I was sustaining 20 mph at what I felt was a leisurely rate as this was the last leg of my ride.

If the average cyclist centers his or her weight over the handle bars (keep the posterior off the seat) in a head-down, body parallel to the ground position, 35 mph is likely. The racing cyclist could easily sustain 60 mph.

John E. D'Aura
Woodbridge, VA 22191

NO ACCIDENT

I have no story to relate as to surviving an accident. However, I recently bought a 1981 Buick Skylark. One of the pre-requisites for my children

(ages 9 and 5) to ride in the new car is the use of seat belts. (We never buckled up in my old reliable 1973 Mustang.) They have accepted seat belts, and now I actually feel insecure without my seat belts on.

Just thought I'd share this with you, and hope I don't need to use the "Make It Click" accident report form.

Okereda B. Choice
Charleston AFB, SC 29404

POSITIVE JUMPS

I read and enjoy your magazine as often as possible and applaud your practical and interesting view points.

With regard to the jump starts article in the March 1982 issue, I have been using the "positive to positive, negative to ground" approach for a long time and it does well. One point often neglected though is for the minority of us who own a positive ground car. This system is designed to "smoke" a set of cables at best. What do we do if the need arises to jump or be jumped?

Lt. Cmdr. Royal W. Connell, USN
FPO NY 90501

Positive ground cars are ONLY jumped from other positive grounded vehicles: negative to negative, positive to ground.

A REAL TIGHT SPOT

Here's a real-life scenario you might be able to use in one of your "Getting out of Tight Spots" articles. My wife picked me up at a train station on Long Island last weekend, after dark, and remained at the wheel for the drive to her parents' cottage. It was raining. As we approached the turnoff to our left on a 55 mph divided highway, in the left lane in preparation for the turn, she shifted into a left-turn-lane but did not slow down. I saw the intersection coming at me from the right-hand seat, with the lane we were in ending in a drainage ditch on the other side. I yelled and she braked into a sideways skid that left us stopped in the middle of the intersection.

Even though my wife knew the road (that's why she was driving) she didn't know where she was at that moment! She had turned into the left-turn lane serving an *unlighted* intersection *between* us and the traffic light marking our *intended* turn down the road. She simply thought it was a *long* left turn lane.

Thought questions for the reader: What was the best action to take in this situation, by the driver? By the passenger? More important, how could this situation have been avoided? We survived to talk it over and come up with our own answers. I encourage others to consider the questions ahead of time.

Lt. William M. Riley, USCG
Governors Island, NY 10004

THE BEST SOLUTION

In regards to your quiz, "In and Out of Tight Spots," May '82, the question of driving 50 mph on a two lane highway. In your quiz you stated that you come to the top of a hill and as you go over the crest you see a line of 4 or 5 cars coming up the hill. One car is trying to pass them and is coming right at you. You stated that the car is only 150 ft. ahead of you when you see him. You said that the correct answer was "B," "Hard brake, release, medium brake, and swerve right." I believe that this answer is incorrect. The correct answer is that you will probably "DIE!"

Let me explain. If you are traveling at 50 mph, this means you are traveling 264,000 ft. per hour. You divide this figure by 60 and come up with 4400 ft. per minute. You divide this figure also by 60 and you will get a traveling distance at 50 mph of 73.33 ft. per second.

Now, assuming the other car is traveling also at 50 mph (this is highly unlikely, he is more likely to be traveling faster since he is passing), in one second both cars will be 4 ft. apart. I do not believe that the reaction times of normal drivers are fast enough to recognize the problem and perform the Hard Brake, Release, Medium Brake and Swerve Right that you gave as the correct answer.

SSgt. Tony Diniz
Ellsworth AFB, SD 57706

It takes the average driver about three-quarters of a second to react to an emergency situation – including seeing, deciding on action and performing that action. In that three-quarters of a second, both cars will travel about 55 feet at 50 mph (or more if you're correct about the speed of the other car). That puts them less than 50 feet apart – not much, but it might be enough. The driver in question has to hard brake to get his speed down, ease off the brakes so he can steer and at the same time steer out of the way to the right. Ours is indeed the best solution, even though it might only minimize the accident. That's why these are "tight spots."

Address your letters to:
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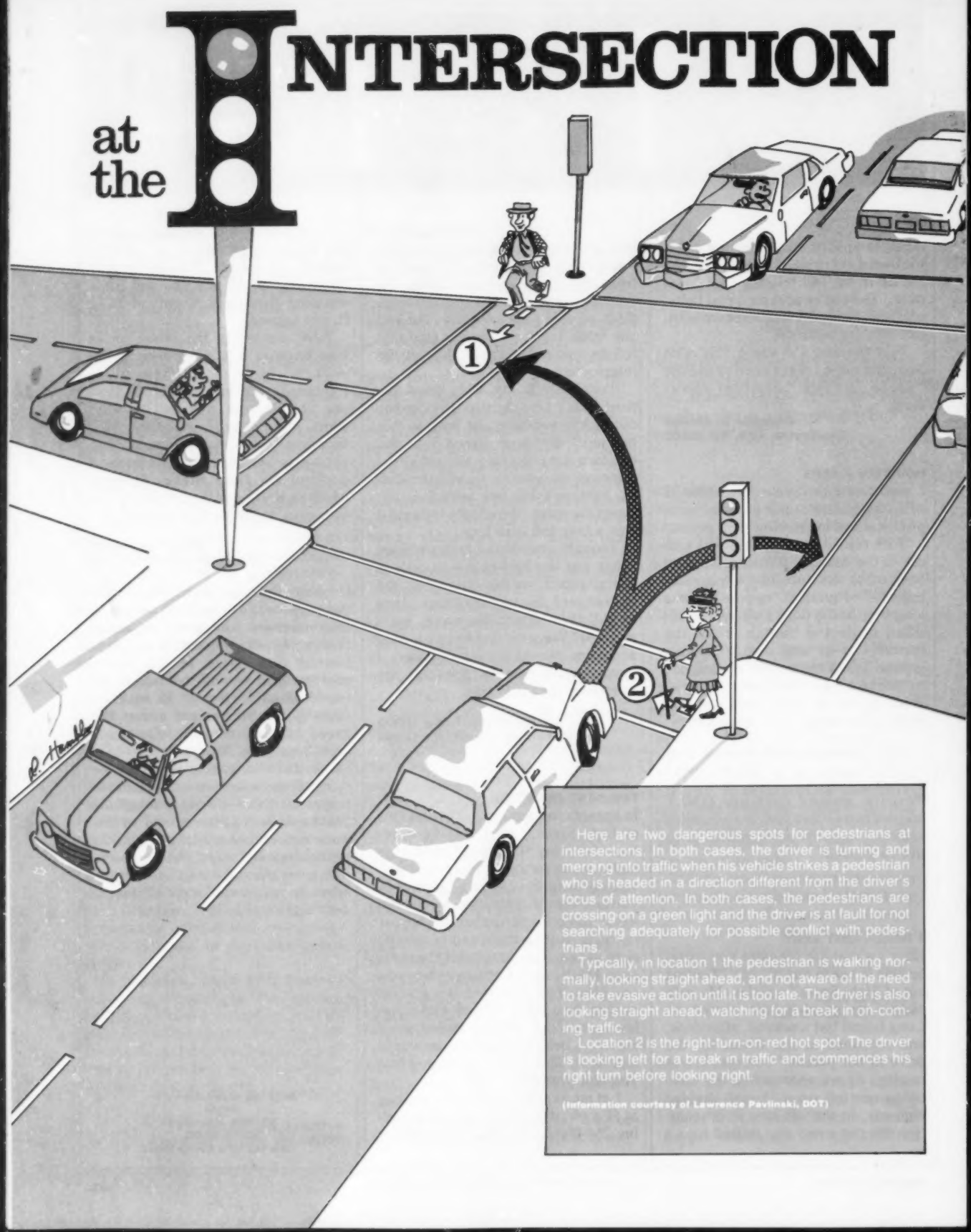
at the INTERSECTION



Here are two dangerous spots for pedestrians at intersections. In both cases, the driver is turning and merging into traffic when his vehicle strikes a pedestrian who is headed in a direction different from the driver's focus of attention. In both cases, the pedestrians are crossing on a green light and the driver is at fault for not searching adequately for possible conflict with pedestrians.

Typically, in location 1 the pedestrian is walking normally, looking straight ahead, and not aware of the need to take evasive action until it is too late. The driver is also looking straight ahead, watching for a break in on-coming traffic.

Location 2 is the right-turn-on-red hot spot. The driver is looking left for a break in traffic and commences his right turn before looking right.

(Information courtesy of Lawrence Pavlinski, DOT)